

Issues on Optimizing the Structural Parameters of the Induction Converter

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Abstract : Analytical expressions of the current and angular errors, as well as the frequency characteristics of an induction converter describing the relation with its structural parameters, the core and winding characteristics are obtained. Based on estimation of the dependences obtained, a mathematical problem of parametric optimization is formulated which can successfully be used for investigation and diagnosing an induction converter.

Keywords : induction converters, magnetic circuit material, current and angular errors, frequency response, mathematical formulation, structural parameters

Conference Title : ICEETA 2014 : International Conference on Electrical Engineering: Theory and Application

Conference Location : Venice, Italy

Conference Dates : August 14-15, 2014